Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 5. (Canceled)

6. (Currently amended) A computer readable storage medium including computer instructions executable on a computer for carrying out a method of

characterizing objects with characteristics based on a prior partial run of a program from which said objects were generated ~~during at least a partial run of a program~~, wherein each object ~~comprising~~ comprises a plurality of potential alternative properties, wherein the computer instructions ~~enable~~ cause the computer to:

a) instrument said at least partial run of said program to determine characterization information about each of said objects to be used at runtime to recognize groups of objects efficiently, as the objects are created, in repeated runs of an object-oriented programs;

~~b) determine a lowest cost property for each of said objects;~~

b ~~c~~) determine a lowest cost one of said potential alternative properties for said objects;

c ~~d~~) determine a correlation between said lowest cost property and said characterization information associated with said objects;

d ~~e~~) express the correlation as an allocation strategy; ~~and~~

e ~~f~~) implement said allocation strategy to select among the alternative properties for an object subsequently created during an at least partial run of said program based upon characterization information about the subsequently created object; and

f) produce a subsequent set of objects comprising the characterization information selected in step e).

7. (Previously presented) The computer readable medium as set forth in claim 6, wherein the computer instructions further enable the computer to determine the lowest cost property by minimizing total cost of interaction among components during the initial partial run of said program.

8. (Previously presented)The computer readable medium as set forth in claim 6, wherein said characterization information of an object comprises at least one of said object's class, classification of said object's creator object, and a code identification of said object's creation site.

9. (Previously presented)The computer readable medium as set forth in claim 6, wherein said alternative properties comprise a string representation selected from ASCII, EBCDIC, and UNICODE.

10. (Previously presented) The computer readable medium as set forth in claim 6, wherein said alternative properties comprise a data structure selected from hash table, tree, and compressed data structures.

11. (Currently amended) A computer-implemented method of ~~characterizing~~ determining a set of characteristics of objects that on a profiling run would have resulted in objects having a property determined by a previous run ~~generated during at least a partial run of a program~~, each object comprising a plurality of potential alternative properties, said method comprising:

a) using a computer for instrumenting an initial run of said program to determine characterization information about each of said objects to be used at runtime to recognize groups of objects efficiently, as the objects are created, in repeated runs of an object-oriented programs;

~~b) using the computer for determining a lowest cost property for said objects;~~

b-~~c~~) using the computer for determining a lowest cost one of said potential alternative

properties for one of said objects;

c ~~d~~) using the computer for determining a correlation between said lowest cost property and said characterization information associated with the one object;

d ~~e~~) using the computer for expressing the correlation as an allocation strategy; and

e ~~f~~) using the computer for implementing said allocation strategy to select among the alternative properties for an object subsequently created during the at least partial run of said program based upon characterization information about the subsequently created object; and.

f) producing a subsequent set of objects comprising the characterization information selected in step e).

12. (Previously presented) The method as set forth in claim 11, wherein the determining of a lowest cost property in step (b) is carried out by minimizing total cost of interaction among components during the initial run of said program.

13. (Previously presented) The method as set forth in claim 11, wherein said characterization information of the object comprises at least one of said object's class, classification of said object's creator object, and a code identification of said object's creation site.

14. (Previously presented) The method as set forth in claim 11, wherein said alternative properties comprise a string representation selected from ASCII, EBCDIC, and UNICODE.

15. (Previously presented) The method as set forth in claim 11, wherein said alternative properties comprise a data structure selected from hash table, tree, and compressed data structures.

16. (Previously presented) The method as set forth in claim 13 wherein expressing the correlation comprises generating an allocation strategy table that relates the object's class and its

creator to the determined lowest cost property during the initial run.

17. (Previously presented) The method as set forth in claim 16 wherein the allocation strategy comprises allocating each instance of the object's class to a same machine as its creator if each instance of the object class has been partitioned onto a machine of its creator.

18. (Previously presented) The method as set forth in claim 17 further comprising linking each instance of the object class with its creator such that the linked instance of said object class is moved if the creator is moved.

19. (New) A method for placing orders for products against inventory, said method comprising:

a) performing an initial run of a program for placing orders for products in a computer system, wherein each order is represented by an order object and monitoring the program to determine a class and a creator for each order object;

b) determining a lowest cost property for each of the order objects;

c) determining a correlation between the property and the class and creator of each order object, and expressing the correlation as a correlation table that relates class and creator to the lowest cost property during the initial run; and

d) providing subsequent order objects comprising properties based on the correlation table using class and creator.

20. (New) The method of claim 19 wherein the step of determining a lowest cost property comprises determining whether the lowest cost property is delivery from Warehouse 1 or Warehouse 2.

21. (New) The method of claim 19 wherein the step of determining characterization information comprises determining whether the class is large or small and whether the creator is terminal 1 or terminal 2.

22. (New) The method of claim 19 further comprising labeling each instance of every class with the machine to which the class was initially allocated.